

REMARKS

Claims 1-10 have been canceled without prejudice.

New Claims 11-26 have been added.

A substitute specification is submitted along with a marked-up copy showing all the changes from the original English translation. Generally, the changes include corrections to grammar and corrections to format, such as the addition of headings, so that the application comports with the typical format used in U.S. patent applications. The substitute application also includes a cross-reference claiming priority to the international application. The substitute specification includes no new matter.

POLY 9203US
Amendment Dated April 29, 2005
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CONCLUSION

Based on the foregoing, the prosecution of Claims 11-26 is requested.

If for any reason the Examiner is unable to allow the application on the next Office Action and feels that an interview would be helpful to resolve any remaining issues, the Examiner is respectfully requested to contact the undersigned attorney for the purpose of arranging such an interview.

The Commissioner is hereby authorized to charge any additional fees or credit overpayment under 37 CFR 1.16 and 1.17, which may be required by this paper to Deposit Account 162201.

Respectfully submitted,

Date: April 29, 2005



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**SUBSTITUTE SPECIFICATION
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SPECIFICATION

To All Whom It May Concern:

Be It Known That We,

Philippe Charrin, a citizen of the France, resident of the City of Beaumont Montoux
whose full post office address is Les Chirouzes, F-26600 Beaumont Montoux; and Andre
Charrin, a citizen of the France, resident of the City of Beaumont Montoux whose full post
office address is Les Chirouzes, F-26600 Beaumont Montoux have invented certain new
and useful improvements in

APPARATUS AND METHOD FOR MOUNTING A DEVICE FOR DISPLAYING AND
PRESERVING FLOWER ARRANGEMENTS

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a national stage application under 35 U.S.C. 371, of International Patent Application No. PCT/EP03/12408 with an international filing date of November 4, 2003, which claims priority to Luxemburg Application No. 90983, filed on November 5, 2002, and both of which are hereby incorporated by reference.

BACKGROUND OF THE INVENTION

~~Title: Apparatus and means for mounting a device for the presentation and preservation of bouquets of flowers.~~

[0002] The present invention involves an apparatus and a method for mounting a device for the presentation and preservation of bouquets of flowers as well as a device for the packaging and preservation of bouquets of flowers.

[0003] Patent EP 0828 446 describes a device for the presentation of bouquets comprising a collapsible support, several slats, a rolled-up connection around the slats, a watertight sheet, a primary fastener for the device, and a secondary fastener comprising of a ribbon.

[0004] Patent EP 0881 167 reveals a receptacle for bouquets of flowers comprising a circular base element from which multiple elongated elements extend.

SUMMARY OF THE INVENTION

[0005] The purpose of the invention is the manufacture of a device for the quick presentation of a bouquet of flowers in the vertical position and preservation of this

bouquet of flowers in the vertical position and the preservation of this bouquet by introducing water through an orifice located in the upper part of the device.

[0006] Another goal of the invention is to create an apparatus for forming a stable device for presenting all kinds of bouquets.

[0007] The present invention involves the quick mounting of a device that is delivered flat and which adapts to any bouquet of cut flowers as a support for storage or sale, by these different shapes with or at sale, by these different shapes with or without bottom, round, square, triangular or other.

[0008] This device and its bouquet once they are in shape, folded in all watertight sheets commonly used in the horticultural or florist milieu, allows a reserve of water to be contained. The weight of the water at its base ensures a perfect stability with a predetermined quantity of water for transport.

[0009] The principle of the apparatus according to the invention allows the manufacture of a device ~~for the transport, from place of sale to destination,~~ that can be used to transport a bouquet folded with the water reserve contained in its packaging from the place of sale to the destination point, while ensuring ~~its~~ the preservation of the bouquet until reaching the final customer, and all along the way without wilting.

[0010] According to the invention, the apparatus is designed for mounting a device for the presentation of individual bouquets of flowers, where this device comprises a base element which may or may not ~~be equipped with~~ have a raised ridge all around its circumference ~~and a sheet.~~ The device also includes a sheet, which may or may not be watertight, placed under the base element that converges towards the center top of the

device and is held in place by a fastener, such as a ribbon, for holding the watertight sheet around the bouquet. The device comprises several movable draping fingers associated with a tightening cord for guiding the sheet around the base element. A support base is movable along a vertical axis for supporting the device and a guide means of predetermined shape is connected to the support base in order to guide all the draping fingers. An activating means ~~is provided that~~ shifts the support base and the guide means along the vertical axis and ~~which~~ simultaneously activates all the draping fingers guided by the guide means such that the tightening cord is tightened around the draped sheet.

[0011] The method of manufacturing a device for the presentation of individual bouquets of flowers in the invention comprises the steps of, ~~which comprises~~:

[0012] positioning the sheet and the base element on the support base for supporting the device;

[0013] moving the support base towards the bottom along a vertical axis and a guide means of predetermined shape connected to the support base in order to prime the fold in the sheet;

[0014] guiding multiple movable pivoting draping fingers associated with a tightening cord for draping the sheet around the base element so as to further tighten the tightening cord around the draped sheet; and

[0015] holding the sheet around the bouquet with an fastener, ~~for example~~ such as a ribbon.

DESCRIPTION OF THE DRAWINGS

[0016] The present invention will be better understood when referring to the following figures:

[0017] Fig. 1 shows the completed device with a bouquet displayed by an apparatus according to the invention;

[0018] Fig. 2 shows ~~the~~ a mounting apparatus according to a preferred embodiment of the invention;

[0019] Fig. 3 shows the ~~manner of embodiment~~ mounting apparatus of Fig. 2 where a fold in a sheet is primed;

[0020] Fig. 4 shows the ~~manner of embodiment~~ mounting apparatus of Fig. 4~~2~~ where draping of the sheet is completed;

[0021] Fig. 5 shows a partial view from below of ~~the manner of embodiment~~ mounting apparatus of Fig. 2;

[0022] Fig. 6 is a ~~representation of the invention in~~ perspective view of the embodiment of Fig. 2 in the position of Fig. 3;

[0023] Fig. 7 is a ~~representation~~ perspective view of the invention in an intermediate position;

[0024] Fig. 8 is a ~~representation~~ perspective view of the invention in the position of Fig. 4;

[0025] Fig. 9 is an assembly view of the ~~manner of~~ embodiment of Fig. 2;

[0026] Figs. 10 to 15 show the successive stages of the method of assembling the device of the invention;

[0027] Fig. 16 is a ~~representation~~ perspective view of the system for filling the device according to the invention;

[0028] Figs. 17 to 19 show the draping device of the invention used mechanically on an automated carousel.

DETAILED DESCRIPTION

[0029] ~~Device (10) in Fig. 1 for the presentation and preservation of individual bouquets of flowers allow the flower(s) to be held at the level of the central axis of the device comprises a base element (2) of any shape, of dimensions which may or may not be adjustable so that they adapt to the size of the bouquets, and which may or may not have a raised ridge (4) all around the circumference which serves to hold the bouquet in the vertical position, where this bouquet may be connected by a primary fastener comprising a connection. This device comprises, moreover, a sheet (5) which may or may not be watertight and which surrounds the base element (2), and which converges towards the center top of device (10) and held by an fastener (9) comprising a ribbon (7) for holding sheet (5) around the bouquet, all of which is arranged to allow the introduction of water through an orifice (6) located in the upper part of the device. Base element (2) of the support can be circular, square, rectangular, triangular, polygonal, or trapezoidal in shape, cruciform, tripodal and tripodal with each foot base connected by an arc-shaped element to the adjacent bases. Base element (2) can have one or more waves and one or more hollows for holding the ends of the flower stems in place. Base element (2) can be made of a conical receptacle (2) with an orifice (6) located in the upper part.~~

[0030] Figure 1 shows a device (10) for the presentation and preservation of individual bouquets of flowers, which holds the flower(s) at the level of a central axis of the device (10). The device (10) includes a base element (2) of any shape, and of desired dimensions, which may or may not be adjustable so that the base element (2) adapts to the size of the bouquets. The base element (2) may or may not have a raised ridge (4) all around the circumference which serves to hold the bouquet in the vertical position, where this bouquet is connected by a primary fastener (9), such as a ribbon (7). The device (10) also includes a sheet (5), which may or may not be watertight, which surrounds the base element (2) and converges towards the center top of device (10).

[0031] The fastener (9) holds the sheet (5) around the bouquet, all of which is arranged to allow the introduction of water through an orifice (6) located in the upper part of the device (10). As shown in Fig. 1, base element (2) is a conical receptacle with an orifice (6) located in the upper part. However, the shape of the base element (2) can be circular, square, rectangular, triangular, polygonal, trapezoidal, cruciform, or tripodal with each foot base connected by an arc-shaped element to the adjacent bases. Also, the base element (2) can have one or more waves and one or more hollows for holding the ends of the flower stems in place.

[0032] The invention according to the principle of folding the standard bouquet comprises a base element (2) and a sheet (5), which may or may not be watertight when lifted, facilitates the shaping of the sheet (5). According to the invention In an alternate embodiment of the invention, the device (10) for the presentation of bouquets can also be mounted without a base element (2), but with a watertight sheet (5) alone.

[0033] As can be seen in Figs. 2 through 4, the apparatus for mounting the device (10) for the presentation of individual bouquets of flowers comprises several movable pivoting draping fingers (15) associated with a tightening cord (16) for guiding the sheet (5) around the base element (2). The number of draping fingers (15) can vary in order to form a device (10) of predefined shape (cone, pyramid, etc.). The tightening cord (16) can be made of metal, plastic, or any other flexible material.

[0034] The apparatus includes a support base (20) that is movable along a vertical axis ~~supports device (10) for supporting the device (10), which is movable along a vertical axis.~~ A guide means (21) of predetermined shape, for example conical, is connected to the support base (2) in order to guide all the draping fingers (15) and give a predefined shape to the device (10).

[0035] ~~A means for activating (30)~~ An activating means, for example a manual lever (30), ~~is used to shift~~ shifts the support base (20) and guide means (21) along the vertical axis, which causes all the draping fingers (15) to pivot, ~~while being guided by guide means (21) in such a way as to tighten the tightening cord (16) around sheet (5).~~ When pivoting, the draping fingers (15) are guided by the guide means (21) in such a way as to tighten the tightening cord (16) around sheet (5).

[0036] ~~Moreover,~~ The apparatus also includes a table (25) equipped with having an orifice (26) that allows the passage of the sheet (5) and the base element (2) so as to prime the fold through the orifice (26) of table (25).

[0037] The manual lever (30) ~~is mounted so that it pivots~~ pivotaly connects to an movable axial connection element (34) that moves along the vertical axis ~~so that it~~

pivots to pivot the draping fingers (15) using pivots (17), ~~where these same fingers (15)~~
~~are also connected to a fixed support element (36)~~. The draping fingers (15) are also
pivotally connected to a fixed support element (36). In operation, the movable axial
element (34) rises and descends by activating lever (30) and fingers (15), which pivot
around the fixed support element (36). According to Figs. 3 and 4, by activating the
lever (30), ~~according to Figs. 3 and 4~~, the support base (20) descends to continue
draping (21) and the conical guide means (21) descends so that it guides the pivoting
of draping fingers (15) and tightens the cord (16) around the sheet (5).

[0038] As shown in Fig. 5, the ends of tightening cord (16) are free and. The cord (16)
slides into openings (18) formed in each of the fingers (15) ~~in order to allow for~~
tightening of the device (10). In the preferred embodiment, openings (18) are formed
horizontally in the ends of the fingers (15) ~~and are a~~ with a diameter slightly larger than
~~that of the diameter of the cord (16) in order to allow it to~~ so that the cord (16) slides
freely. The ends of the fingers (15) are arranged so that cord (16) forms a circle. The
radius of this circle decreases by pivoting the fingers (15) due to activation of the lever
(30), thereby, allowing the cord (16) to slide in within the openings (18) of the fingers
(15).

[0039] The lever (30) comprises a stoppage system (33) ~~for keeping that keeps~~ the
lever (30) in the horizontal position when draping ~~has been~~ is completed and allowing
~~fastener (9) allows attachment~~ of the sheet (5) around the bouquet with the fastener 9.
~~Once After attachment is complete has been completed~~, the apparatus frees the device
(10), which rises due to the action of the manual lever (30).

[0040] The guide means (21) ~~can be~~ is generally conical in shape so that the draping fingers (15) are guided by the guide means (21) as while the support base (20) and the guide means (21) are being simultaneously displaced, thereby, allowing a generally conical conjugated device (10) to be formed. Following the same principle, bases (2) ~~Following the same principle can be considered, and may be~~ of different shapes such as square, triangular, rectangular, etc. ~~in shape in order~~ can be considered to obtain a pyramidal device.

[0041] The apparatus of the invention can also comprise a source of water in combination with a pressure regulator and a solenoid valve controlled by an integral timer to fill the device with a predefined volume of water, as shown in Figs. 9 and 16 ~~(see Fig. 9 and 16)~~. As the device (10) is filled with water by the combination of a pressure regulator and a solenoid valve controlled by an internal timer, the operator tentatively defines a volume of water defined by:

$$\frac{\text{Pressure}}{\text{Opening time}} = \text{constant volume of water}$$

[0042]

[0043] The filling system can be combined with a preserving product mixer for bouquets of flowers.

[0044] Attaching the draped sheet (5) with the fastener (9) can be done ~~in current operation time as the water is filling~~ concurrently with filling the device (10) with water, either manually or by any automatic system known on the market or developed to specification.

[0045] Once filling ~~is done~~ and attachment is completed, the apparatus frees the bouquet and its water reserve either manually by lifting the lever (30) or mechanically, such as by a button. All operations can be ~~steered by an automaten controlled~~ automatically. ~~In this version~~ In a preferred embodiment, the bouquet with or without support (2) will be brought to the station automatically.

[0046] The device in the present invention has two functions: 1) Draping of a sheet (5), which may or may not be watertight, around just one bouquet, which may or may not be equipped with a support (2), ~~primary complete~~ the completed device commonly called a water reserve bouquet; and 2) Adjustment and filling the device with a predefined volume of water.

[0047] According to the method of the invention, draping is combined with multiple fingers (15) following the descent, and the cord tightening sheet (5) with the system of preventing the sheet from being stuck, where these two combinations ensure a perfect "draping".

[0048] The method comprises ~~steps which comprise~~ the steps of: positioning the sheet (5) and the base element (2) on the support base (20) for supporting the device; priming the fold in the sheet (5) for passing the sheet (5) and the base element (2) through the orifice (26) in the support table (25); moving the support base (20) downwards along a vertical axis and the guide means (21) connected to the support base (20) in order to continue folding sheet (5); and guiding all the pivoting movable draping fingers (15) associated with tightening cord (16) in order to drape sheet (5)

around base element (2) so as to tighten tightening cord (16) around draped sheet (5), and holding sheet (5) around the bouquet by fastener (9) comprising of a ribbon (7).

[0049] By activating the lever (30), the lowering of support base (20) and guide means (21) is simultaneous with the pivoting of draping fingers (15), which are guided by guide means (21) to ensure a perfect shape of device (10).

[0050] Successive stages of the assembly method of the invention are illustrated in Figs. 10 through 15.

[0051] Fig. 10 illustrates positioning of a sheet (5) of paper on table (25) of the apparatus.

[0052] Fig. 11 illustrates priming of the folding by orifice (26) in the table by positioning the bouquet with or without base element (2) and by driving everything through the orifice (26).

[0053] Figs. 12 and 13 illustrate the activating of the lever (30) and draping the base element (2) with the sheet (5) and simultaneous driving and mounting the lever (30) (mechanical or manual).

[0054] Fig. 14 illustrates filling the device (10) with water through upper orifice (6) of the device (10) ~~in concurrent operation time by~~ concurrently with attaching the draped sheet (5) and blocking the system once draping has been completed.

[0055] Fig. 15 shows withdrawal of the device (10) once filling ~~is done~~ and attachment is completed. The apparatus frees the bouquet and its water reserve manually by lifting the lever or mechanically with a button.

[0056] Figs. 17-19 show the draping device in the invention used mechanically on an automated carousel. In particular, as shown in Figs. 17-19, a series of draping devices of the invention (for example a series of three devices) can be arranged on a carousel that turns so as to automate the manufacturing process of the device for presentation of individual bouquets of flowers. It goes without saying that the draping device in the invention can therefore be used either manually, or mechanically on a carousel of this type.

Claims:

1. Apparatus for assembling a device (10) for the presentation of individual bouquets of flowers, where this device comprises a base element (2) which may or may not be equipped with a raised ridge (4) all around its circumference, and a sheet (5) which may or may not be watertight, placed under base element (2), and converging towards the center top of device (10) and held by an fastener (9) comprising a ribbon (7) for holding the watertight sheet (5) around the bouquet,

distinguished by the fact that the apparatus comprises:

several movable pivoting draping fingers (15) associated with a tightening cord (16) for guiding sheet (5) around base element (2),

a movable support base (20) that follows a vertical axis in order to support device (10),

a means for guiding (21) of predetermined shape connected to the support base (20) for guiding all the draping fingers (15), and

a means of activating (30) for shifting the support base (20) and the guide means (21) along the vertical axis and for making all the draping fingers (15) pivot as they are guided by guide means (21) so that they tighten tightening cord (16) around draped sheet (5).

2. Mounting device according to claim 1, distinguished by the fact that it comprises a table (25) equipped with an orifice (26) for passage of sheet (5) and base element (2) and priming the fold through orifice (26) in table (25).

3. Assembly apparatus according to claim 1, distinguished by the fact that it comprises a source of water in combination with a pressure regulator and a solenoid valve controlled by an interval timer in order to fill device (10) with a predefined volume of water.

4. Assembly apparatus according to claim 3, distinguished by the fact that the filling system is combined with a mixer for preserving product.

5. Assembly apparatus according to claim 1, distinguished by the fact that the guide means (21) is of a generally conical shape such that draping fingers (15) guided by guide means (21) during the simultaneous shifting of support base (2) and guide means (21) allow shaping of the generally conical device.

6. Assembly apparatus according to claim 1, distinguished by the fact that this means of activating (30) is a manual activation lever (30) connected to the support base (20) in order to move the latter along the vertical axis.

7. Means of manufacturing a device for the presentation of individual bouquets of flowers, where this device comprises a base element (2) which may or may not feature a raised ridge all around its circumference, and a sheet (5) which may or may not be watertight placed under base element (2), and which converges towards the center top of device (10) and held by a fastener (9) comprising a ribbon (7) for holding watertight sheet (5) around the bouquet,

distinguished by the fact that the method comprises the following steps:

positioning sheet (5) and base element (2) onto support base (20) to support the device,

moving support base (20) towards the bottom along a vertical axis and a guide means (21) of predetermined shape connected to support base (20) in order to proceed with folding sheet (5),

guiding multiple movable pivoting draping fingers associated with a tightening cord (16) for draping sheet (5) around base element (2) so as to tighten tightening cord (16) around draped sheet (5), and

holding sheet (5) around the bouquet by fastener (9) comprising a ribbon (7).

8. Method of manufacture according to claim 7, distinguished by the fact that the fold in sheet (5) is primed by passing sheet (5) and base element (2) through an orifice (26) in a support table (25).

9. Method of manufacture according to claim 7, distinguished by the fact that the lowering of support base (20) and of guide means (21) is simultaneous with the pivoting of draping fingers (15) by shifting of a means of activating (30) connected to support base (20).

10. Method of manufacture according to claim 7, distinguished by the fact that attaching of draped sheet (5) is done in concurrent operation time as the device is being filled with water.

ABSTRACT OF THE DISCLOSURE

The invention concerns an apparatus for mounting a device (10) for displaying individual flower arrangements. The device includes a base element (2) which may or may not be equipped with a raised ridge (4) over its entire circumference, and a sheet (5) which may or may not be watertight placed under base element (2) and which is gathered around the center top of the device (10) and held by an fastener (9) such as a ribbon (7) for keeping the sheet (5) sealed around the flower arrangement. The apparatus includes several movable pivoting draping fingers (15) associated with a tightening cord (16) for guiding the sheet (5) around the base element (2), a support base plate (20) that moves along a vertical axis to support device 10, a guide means (21) of a predetermined shape connected to base plate (20) for guiding all the draping fingers (15), and an actuating means (30) for moving the base plate (20) and the guide means (21) along the vertical axis and for pivoting all the draping fingers (15) that are guided by guide means (21) so that the cord (16) is bound around draped sheet (5).